

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2002-0206

NPDES NO. CAS082597

WASTE DISCHARGE REQUIREMENTS
FOR
COUNTY OF SACRAMENTO AND
CITIES OF CITRUS HEIGHTS, ELK GROVE, FOLSOM, GALT AND SACRAMENTO
STORM WATER DISCHARGES FROM
MUNICIPAL SEPARATE STORM SEWER SYSTEMS
SACRAMENTO COUNTY

The following is an excerpt from the permit, related to Development Standards.

Development Standards

16. The Permittees shall minimize the short and long-term impacts on receiving water quality from new development and significant redevelopment. In order to reduce pollutants in runoff flows from these sources to the MEP, each Permittee shall review and update its existing program, which shall, at a minimum, address the following:
 - a. Each Permittee shall incorporate water quality and watershed protection principles into planning procedures and policies such as: the General Plan or equivalent plans (e.g., Comprehensive, Master or Community Plan) to direct land use decisions and require implementation of consistent water quality protection measures for all development projects. Such water quality and watershed protection principles and policies shall consider the following:
 - i. Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and use on-site infiltration of runoff in areas with appropriate soils where the infiltration of storm water would not pose a potential threat to groundwater quality.
 - ii. Implement pollution prevention methods supplemented by pollutant source controls and/or treatment controls. Where practical, use strategies that control the sources of pollutants or constituents (i.e., the point where water initially meets the ground) to minimize the transport of storm water and pollutants offsite and into MS4s.
 - iii. Preserve and, where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands and buffer zones.

- iv. Limit disturbances of natural water bodies and natural drainage systems caused by development, including roads, highways, and bridges.
 - v. Use existing drainage master plans or studies to estimate increases in pollutant loads and flows resulting from projected future development and require incorporation of structural and non-structural BMPs to mitigate the projected increases in pollutant loads in runoff.
 - vi. Identify and avoid development in areas that are particularly susceptible to erosion and sediment loss, or establish development guidance that protects areas from erosion and sediment loss.
 - vii. Implement source and/or treatment controls as necessary to protect downstream receiving water quality from increased pollutant loads in runoff flows from new development and significant redevelopment.
 - viii. Control the post-development peak storm water run-off discharge rates and velocities to prevent or reduce downstream erosion, and to protect stream habitat.
 - b. Prior to project approval and issuance of local permits for new development and significant redevelopment, each Permittee shall review the proposed project plan and require measures to ensure that all development is in compliance with the Permittee's storm water ordinances, local permits, and other applicable requirements.
17. By **1 December 2003**, each Permittee, except the City of Galt, shall develop and submit for public review and comment, and Executive Officer approval a **Development Standards Plan (DSP)** which describes measures to reduce pollutant discharges to the MEP from all new development and significant redevelopment projects. The City of Galt shall meet this requirement by **1 July 2004**. To ensure consistency with the applicable portions of State Board Order WQ 2000-11, the DSP shall provide the following information:
- a. A description of existing Development Standards, if any, including project categories, BMP requirements and numeric sizing criteria;
 - b. A comparison of existing development standards to the requirements established under State Board Order WQ 2000-11 and/or other applicable directives; and
 - c. A description of the proposed modifications to the Development Standards to ensure that, at a minimum, they are consistent with the requirements of State Board Order WQ 2000-11 and this Order.
18. Within one year of approval of the DSP, each Permittee shall amend, or adopt if needed, its own local Development Standards, including amendment of ordinances as needed.

19. Upon amendment or adoption of local Development Standards, each Permittee shall ensure that all new development and significant redevelopment projects falling under the priority project categories listed below are reviewed and conditioned for compliance with the Development Standards. The local Development Standards shall apply to all priority projects or phases of priority projects that do not have the following by the adoption date for the local Development Standards: approval by the City or County Engineer, permit for development or construction, an approved special permit, or an approved tentative map.
- a. **Priority Development Project Categories:** Development Standards requirements shall apply to all new development and significant redevelopment projects falling under the priority project categories listed below. The term “significant redevelopment” is defined as the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to expansion of a building footprint, or replacement of a structure; replacement of impervious surface that is not part of a routine maintenance activity; and land-disturbing activities related to structural or impervious surfaces. Where significant redevelopment results in an increase of less than 50 percent of the impervious surfaces of a previously existing development, and the existing development was not subject to Development Standards, the BMP design standards discussed below apply only to the addition, and not to the entire development. Priority Development Project Categories are listed below.
- i. Home subdivisions with ten housing units or more. This category includes single-family homes, multi-family homes, condominiums, and apartments.
 - ii. Commercial developments. This category is defined as any development on private land that is not for heavy industrial or residential uses where the impervious land area for development 100,000 square feet or more. The category includes, but is not limited to hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, commercial nurseries, car wash facilities, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses, and other light industrial facilities.
 - iii. Automotive repair shops. This category is defined as a facility that is categorized by one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539, where the total impervious area for development is 5,000 square feet or more.
 - iv. Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812) and has 5,000 or more feet of impervious area.

- v. Hillside developments 5,000 square feet or more of impervious area. This category is defined as any development that creates 5,000 square feet of impervious surface in an area with known erosive soil located in an area with natural slopes having a twenty-five percent or greater grade.
 - vi. Parking lots exposed to rainfall that are 5,000 square feet or more, or with 25 or more parking spaces. This category is defined as an uncovered impervious area for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.
 - vii. Street, roads, highways, and freeways. This category includes any paved surface five acres or greater used by automobiles, trucks, motorcycles, and other vehicles.
 - viii. Retail Gasoline Outlets. “Retail Gasoline Outlet” is defined as any facility engaged in selling gasoline with 5,000 square feet or more of impervious surface area.
- b. BMP Requirements: The Development Standards Plan shall include a list of recommended source and/or structural treatment control BMPs for all new development and significant redevelopment projects falling under the above priority project categories or locations. At a minimum, Retail Gasoline Outlets shall be required to use the BMPs listed in the California Storm Water Quality Task Force, March 1997 BMP Guide for Retail Gasoline Outlets.
- c. Numeric Sizing Criteria: As a part of the DSP, the Permittees shall review their existing numeric sizing criteria for structural treatment BMPs and ensure that it is comparable to the following numeric sizing criteria:
- i. Volume-based BMPs shall be designed to mitigate (infiltrate or treat) either:
 - a) The volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the local historical rainfall record; or
 - b) The volume of runoff produced by the 85th percentile 24-hour rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or
 - c) The volume of annual runoff based on unit basin storage volume, to achieve 80 percent or more volume treatment by the method recommended in California Storm Water Best Management Practices Handbook – Industrial/Commercial, (1993).

- ii. Flow-based BMPs shall be designed to mitigate (infiltrate or treat) either:
 - a) The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or
 - b) The maximum flow rate of runoff, as determined from local historical rainfall records, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.
- d. Equivalent Numeric Sizing Criteria: The Permittee may develop or use any equivalent numeric sizing criteria or performance-based standard for post-construction structural treatment BMPs as part of these requirements. Such equivalent sizing criteria may be authorized for use in place of the above criteria. In the absence of an equivalent numeric sizing criteria, the criteria contained above shall be implemented.
- e. Pollutants and Activities of Concern: The DSP shall consider pollutants of concern or activities of concern in identifying appropriate BMPs for new development or significant redevelopment projects. In selecting BMPs, the following shall be considered: (1) the target pollutants; (2) land use and pollutants associated with that land use type; (3) pollutants expected to be present on site at concentrations that would pose potential water quality concerns; and (4) changes in flow rates and volumes resulting from the development project and sensitivity of receiving waters to changes in flow rates and volumes.
- f. Implementation Process: The DSP shall describe the process used to implement the Development Standards and all proposed modifications to the process. The process shall also include identification of the roles and responsibilities of various municipal departments in implementing these standards, as well as any other measures necessary for the implementation of these standards.
- g. Infiltration and Groundwater Protection: To protect groundwater quality, the Permittee shall apply restrictions to the use of structural BMPs designed to primarily function as infiltration devices (such as infiltration trenches and infiltration basins). Such restrictions shall ensure that the use of such infiltration structural treatment BMPs shall not cause a violation of applicable groundwater quality standards.
- h. Downstream Erosion: The DSP shall include any existing criteria or proposed modifications to ensure that discharges from new development and significant redevelopment address the potential for downstream erosion and protect stream habitat. At a minimum, the Permittees' Development Standards process shall consider the need for measures to control peak storm water discharge rates and velocities in order to protect downstream erosion and stream habitat. Storm

water discharge volumes and durations should also be considered in the Development Standards.

- i. **Waiver Provision:** The Permittee may provide for a project to be waived from the requirement of implementing structural treatment BMPs if infeasibility can be established as described below.
- j. **Conflicts with Local Practices:** The DSP shall include a description of necessary modifications to existing codes and ordinances and an implementation schedule for these modifications.

20. **Regional Storm Water Mitigation Program:** A Permittee may apply to the Regional Board for approval of a regional or sub-regional storm water mitigation program to substitute in part or wholly for Development Standard requirements. Upon review and a determination by the Executive Officer that the proposal is technically valid and appropriate, the Regional Board may consider for approval such a program if its implementation will:

- a. Result in equivalent or improved storm water quality;
- b. Protect stream habitat;
- c. Promote cooperative problem solving by diverse interests;
- d. Be fiscally sustainable via secured funding; and
- e. Be completed in five years, including the construction and start-up of treatment facilities.

Nothing in this provision shall be construed as to delay the implementation of Development Standard requirements as required by this Order.

21. **Waiver Program:** Anytime during the term of the Order, a Permittee may propose a waiver program that would require any developers receiving waivers to transfer the savings in cost, as determined by the Permittee, to a storm water mitigation fund. Any proposed waiver program shall be subject to the approval of the Executive Officer. Any Permittee may consider a waiver for projects where structural treatment BMPs are infeasible. The Permittee shall only grant a waiver when all appropriate structural treatment BMPs have been considered and rejected as infeasible. The Permittee shall notify the Regional Board **within one month** of each waiver issued and shall include the name of the person granting each waiver. Funds may be used for projects to improve urban runoff quality within the watershed of the waived project. At a minimum, a proposed waiver program shall identify the following:

- a. The entity or entities that will manage (i.e., assume full responsibility for) the storm water mitigation fund;
- b. The range and types of acceptable projects for which mitigation funds may be expended;
- c. The entity or entities that will assume full responsibility for each mitigation project, including its successful completion; and

- d. How the dollar amount of fund contributions will be determined and managed.
22. **Maintenance Agreement and Transfer:** Each Permittee shall require that all developments subject to Development Standards and site specific plan requirements provide verification of maintenance provisions for post-construction structural and treatment control BMPs. Verification shall include one or more of the following as applicable:
- a. The developer's signed statement accepting responsibility for maintenance until the maintenance responsibility is legally transferred to another party; or
 - b. Written conditions in the sales or lease agreement that require the recipient to assume responsibility for maintenance; or
 - c. Written text in project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to a home owner's association, or other appropriate group, for maintenance of structural and treatment control BMPs; or
 - d. Any other legally enforceable agreement that assigns responsibility for maintenance of structural or treatment control BMPs.
23. **California Environmental Quality Act Document Update:** Each Permittee shall incorporate into its CEQA process, within 180 days of the effectiveness date of this Order, procedures for considering potential storm water quality impacts and providing for appropriate mitigation when preparing and reviewing CEQA documents. The procedures shall require consideration of the following:
- a. Potential impact of project construction on storm water runoff;
 - b. Potential impact of project post-construction activity on storm water runoff;
 - c. Potential for discharge of storm water from material storage areas, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas;
 - d. Potential for discharge of storm water to impair the beneficial uses of the receiving waters or areas that provide water quality benefit;
 - e. Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and water bodies;
 - f. Potential for significant changes in the flow velocity or volume of storm water runoff that can cause environmental harm; and
 - g. Potential for significant increases in erosion of the project site or surrounding areas.
24. **General Plan Update:** Each Permittee shall do the following:
- a. Evaluate and amend, revise, or update as necessary, its General Plan to include watershed and storm water quality and quantity management considerations and

policies when any of the following General Plan elements are updated or amended: land use, housing, conservation, and open space.

- b. Provide the Regional Board with the draft amendment or revision when a listed General Plan element or the General Plan is noticed for comment in accordance with California Government Code § 65350 *et seq.*

25. **Targeted Employee Training:** Each Permittee shall provide annual training for its employees in targeted positions (whose jobs or activities are engaged in development planning), regarding the requirements of this Order that affect development planning beginning no later than **1 September 2004**.

26. **Technical Guidance and Information for Developers**

- a. Each Permittee shall make Development Standards available to developers as they are adopted/approved.
- b. Within one year of adopting Development Standards, each Permittee shall issue new or amended technical guidance manuals to the development community in that Permittee's jurisdiction for the siting and design of storm water quality BMPs. The technical manual(s) shall at a minimum include:
 - i. Source and treatment control BMP design criteria for BMPs acceptable for use in the local area;
 - ii. Peak flow control criteria to control peak discharge rates, velocities and duration;
 - iii. Expected pollutant removal performance ranges for the BMPs (or references to national databases, technical reports and/or scientific literature); and
 - iv. Maintenance considerations.